

LUDVÍK, B., Inzh.-kapitán b ranga

The ship and radioactivity. Voen. znan. 41 no.10:35 0 '65.

(MIRA 18:10)

SOV-120-58-3-25/33

AUTHORS: Malkiel', G. S., Sukhanov, B. I.

TITLE: A Pulsed High Frequency Ion Source (Impul'snyy vysokochastotnyy istochnik ionov)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1958, Nr 3, pp 100-101  
(USSR)

ABSTRACT: A high frequency source in which the discharge is excited using a h.f. oscillator is described. The extracting potential applied between the anode and the probe is also obtained from a pulse generator. The construction of the source is shown in Fig.1. The envelope is made of glass while the extracting electrode is of an aluminium alloy and the anode is made of graphite. The shape of the channel in the probe is shown separately in Fig.1. The high frequency oscillator works on two GI7B valves. Voltage pulses 5 kV in amplitude and 8  $\mu$ sec long are applied to the anodes of the valves. The voltage pulses are obtained from a modulator including a hydrogen thyratron. Since the average power applied to the plasma does not exceed 30 Watts no special cooling is necessary. The transit time between the boundary of the plasma and the probe, corresponding to a final proton energy of 20-30 keV, is of the order of 0.1  $\mu$ sec. Hence if the Card 1/3 extracting pulse is shorter than 0.2-0.3  $\mu$ sec the focussing

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A Pulsed High Frequency Ion Source

of ions becomes much worse and the output current rapidly decreases. When the width of the extracting pulse is 0.8  $\mu$ sec the width of the current pulse at the target is 0.5  $\mu$ sec. It was shown experimentally that the energy of the protons does not change over the duration of the extracting pulse. Fig.2 shows the magnitude of the ion current obtained from the source as a function of the position of the extracting pulse relative to pulse which excites the plasma. The proton current is proportional to  $V^{3/2}$  where V is the magnitude of the voltage pulse applied to the source. The optimum pressure in the source is  $10^{-2}$  mm Hg. When the diameter of the aperture in the probe is 3 mm the gas consumption is 30 cc/hour. At the same time the vacuum pump (pumping speed 500 litres/sec) maintains a vacuum of  $1.5 \times 10^{-5}$  mm. Fig.4 shows the output current as a function of the square of the diameter of the aperture in the probe. The relation is approximately linear. The content of atomic ions is 80-90%. The difference in the current for protons and deuterons

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is 10%. The source gives current pulses of 100-200 mA each, the length of each pulse being 1  $\mu$ sec and the repetition frequency  $10^3$  sec<sup>-1</sup>. V. Yu. Gavrilov is thanked for his help. There are 4 figures, no tables and 4 references, of which 3 are English and 1 Soviet.

SUBMITTED: September 7, 1957.

- 1. Ionic currents--Sources
- 2. Pulse generators--Equipment
- 3. Pulse generators--Performance

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S/120/60/000/004/005/028  
E032/E414

212100

AUTHORS: Malkiel', G.S. and Sukhanov, B.I.

TITLE: A Pulsed Neutron Source

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No.4, pp.46-50

TEXT: A description is given of an accelerating tube producing pulses of  $14^{\text{MeV}}$  neutrons. The pulse duration can lie between  $10^{-6}$  and  $10^{-8}$  sec. and the repetition frequency is 500 cps.

The instantaneous neutron flux in a pulse is  $10^{12}$  neutrons per sec. The neutron tube employs the high-frequency ion source described by the present authors in Ref.4. This ion source gives instantaneous currents which are considerably greater than in the usual "continuous" high-frequency sources. The use of a pulsed high-frequency source enables one to obtain a large instantaneous neutron flux with tubes of relatively small dimensions and weight. Thus, when the current at the target is about 40 mA, and the total ion accelerating voltage is 180 kV, of which 30 kV is applied to the high-frequency source and 150 kV is applied to the target, the neutron output when the D + T reaction is employed is  $10^{12}$  neutrons/sec. One of the biggest difficulties in the design of high-current accelerating tubes is the divergence of the ion beam

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A Pulsed Neutron Source

caused by the Coulomb repulsion between the beam particles. In the design described in the present paper, this is obviated by placing the target at a relatively small distance from the source. This is shown schematically in Fig.1. Ions from the source slit are passed through deflecting plates to which a pulsed voltage of up to 10 kV is applied. When this voltage is not applied to the plates, the ions do not enter the accelerating gap and hence the length of the neutron pulse is determined by the length of the pulse applied to the plates. A zirconium-tritium target on a tungsten base (14 mm diameter) is used. The second variant of the tube is shown in Fig.2. In this design a window for inspecting the focusing of the beam at the target is provided. All the supplies are derived from four pulse generators triggered through delay lines from a master generator (500 cps). The latter is in the form of a conventional square-pulse generator which develops 200 V across a 150 ohm load at two independent outputs. Pulses at output II can be delayed relative to pulses at output I by 1 to 6  $\mu$ sec. This arrangement supplies the following pulse voltages: (1) 8 kV pulses 5  $\mu$ sec long which are applied to the

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ion source generator, (2) 40 kV pulses 1  $\mu$ sec long for the ion source as shown in Fig.1 and 3, (3) rectangular pulses  $10^{-8}$  to  $10^{-6}$  sec, having an amplitude of 10 kV which are applied to the deflecting plates, and (4) 150 kV accelerating pulses 2 - 3  $\mu$ sec long. All the generators are based on the circuit shown in Fig.4. Neutron beams produced with this tube have been analysed by the time-of-flight method, using a 20-channel time analyser. A description is given of the circuits employed in conjunction with the neutron detector and the form of a typical neutron pulse is shown in Fig.7 in which the time ( $\mu$ sec) is plotted along the horizontal axis. Fig.8, 9, 10 show typical neutron spectra for neutrons leaving 6 cm thick lead and graphite plates. In the case of Fig.8, the target was simply surrounded by a lead plate and the detector (stilbene) received the primary neutrons. The flight path in these measurements was 5 metres. In order to reduce the background due to direct 14 MeV neutrons, a copper rod 60 cm long and 25 mm in diameter was placed in their path. In these measurements the flight path was 6 m and the results obtained are

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shown in Fig. 9 and 10. Here a polystyrene-based plastic scintillator was used as the detector ( $400 \text{ cm}^3$ ). A collimator was employed to reduce the background. The lower curve in each of these graphs shows the background level. A correction was made for the np cross section and the threshold of the detector. The tube has been found to be satisfactory after prolonged experiments and tests. The ion source has a lifetime in excess of 300 hours. Acknowledgment is expressed to N.V.Popov for assistance in the measurements. There are 10 figures and 4 references: 1 Soviet and 3 non-Soviet.

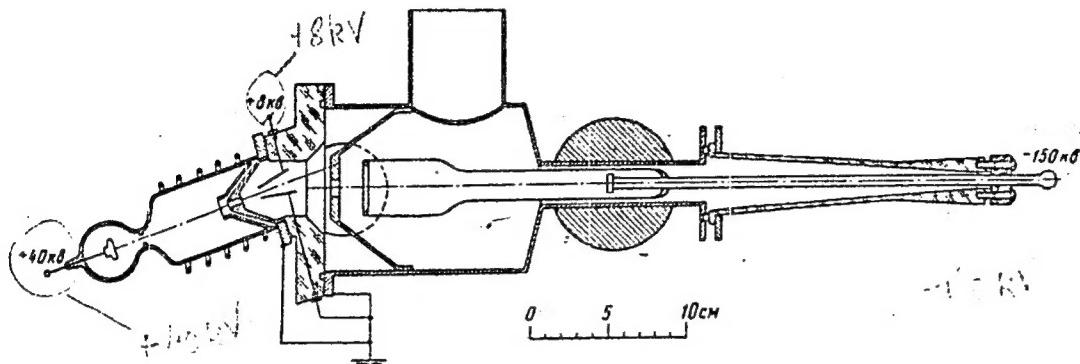
SUBMITTED: November 26, 1958 (initially)  
June 14, 1959 (after revision)

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A Pulsed Neutron Source



Plat. I

Fig. 1.

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A Pulsed Neutron Source

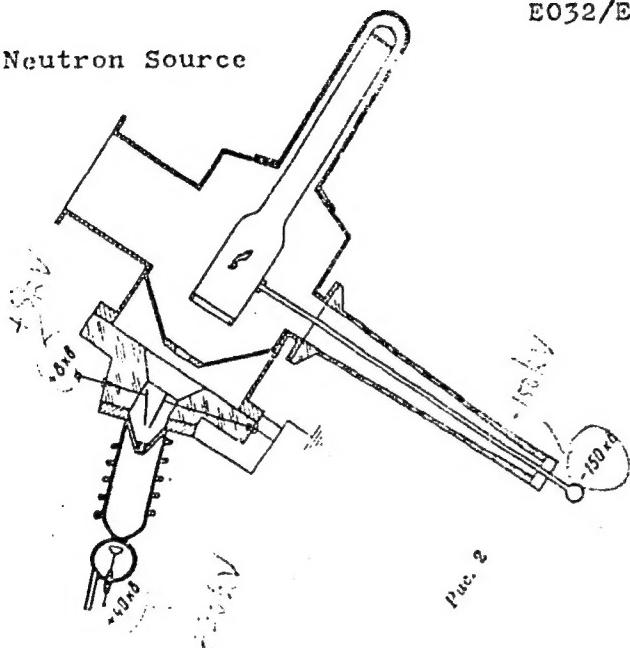


Fig. 2.

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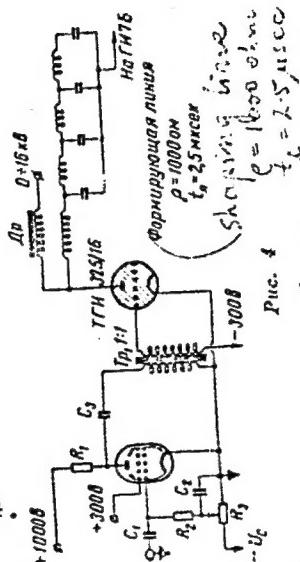


Fig. 4.

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3/120/50/000/001/005/02  
2052/E414

## A Pulsed Neutron Source

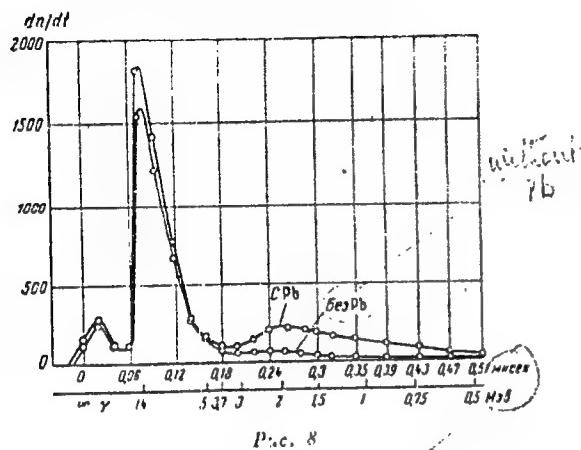


Fig. 8.

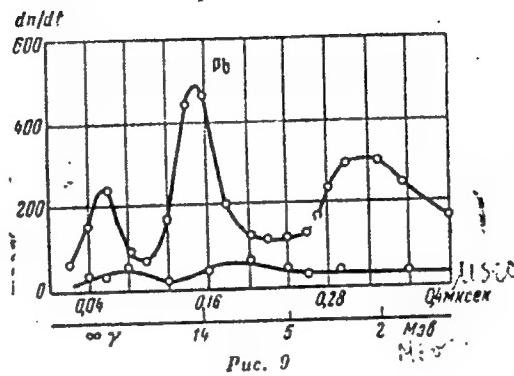


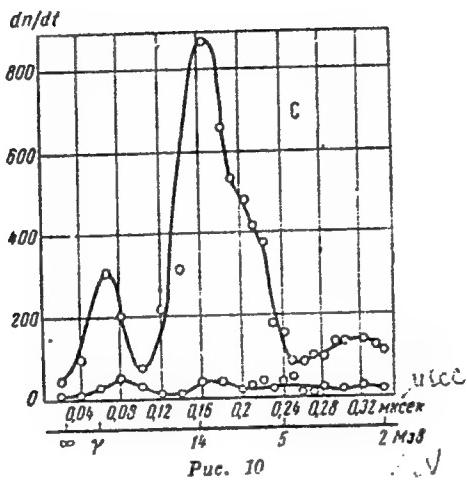
Fig. 9.

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001653810007-0"

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A Pulsed Neutron Source



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SUKHANOV, B.I.; RUKAVISHNIKOV, V.G.

Inelastic scattering of 14 Mev. neutrons on sodium, iron, nickel,  
and lead nuclei. Atom. energ. 11 no.4:398-399 O '61. (MIRA 14:9)  
(Neutrons--Scattering) (Nuclei, Atomic)

SOV/122-59-3-12/42

AUTHOR: Sukhanov, B.K., Candidate of Technical Sciences

TITLE: New Electric Hoists with a Lifting Wire Rope (Novyye elektrotali s kanatnym tyagovym organom)

PERIODICAL: Vestnik Mashinostroyeniya, 1959, Nr 3, pp 39-43 (USSR)

ABSTRACT: A series of new electric hoist types developed by the Central Design Office of the All-Union Scientific Research Institute for Lifting and Conveying Equipment (TsKB Vsesoyuznogo Nauchno-Issledovatel'skogo Instituta Pod'yemno-Transportnogo Mashinostroyeniya, VNIIPTMASH), is discussed and illustrated. 8 hoists in a range of capacities between 1/8th and 7.5 tons, all with a lifting speed of 8 m/min and various lifting heights, are specified in Table 1. The weight per useful hp is plotted in Fig 1. In hoists of 2 and 3 ton capacity the weight per hp barely exceeds 100 kg, shown to compare favourably with leading German and American makes. The hoist mechanisms are designed for a five-year service life. At  $\frac{1}{2}$ -ton capacity and above, two-speed lifting is achieved by a two-winding motor. The low speed winding can be over-loaded 15% for 3 minutes. Up to  $\frac{1}{2}$ -ton capacity, contactorless starting of the hoist motor is

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New Electric Hoists with a Lifting Wire Rope

carried out with a push-button direct-on starter illustrated in cross-section in Fig 2. Deeper pressing of the button connects the high-speed winding. 8 models of hoist carriages are offered as shown in the chart reproduced in Fig 4. In some of the variants, the lifting rope drum is the hoisting motor stator casing.

There are 8 figures and 3 tables.

Card 2/2

BALAKHONOV, V.N., inzh.; SUKHOV, B.V., inzh.

Telephone communications during the sinking of shafts excluding  
the reception and transmission of outside noises. Trudy KuzNII-  
shakhtostroia no.1:31-40 '63. (MIRA 17:8)

SURKHOV, D. K.

SURKHOV, D. K.- "Vertical Transportation of Books in Libraries." Min of Higher Education USSR, Moscow. Order of Labor Red Banner Higher Technical School imeni Dzerzhinskogo, Moscow, 1955 (Dissertations for Degree of Candidate of Technical Sciences)

SS: Knizhnaya Letopis' No. 26, June 1955, Moscow

SUKHANOV, D.K., kand.tekhn.nauk

New electric pulleys with hauling ropes. Vest.mash. 39  
no.3:39-43 Mr '59. (MIRA 12:4)  
(Pulleys)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0

SUKHANOV, Donat Konstantinovich, kand. tekhn. nauk; FLAVINSKIY,  
V.I., kand. tekhn. nauk, red.

[Modern monorail conveying] Sovremen. monorel'sovyi  
transport. Leningrad, 1964. 40 p. (FIRA 18:1)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0"

SUKHANOV, D. V.

Sukhanov, D. V. - "The problem of the peculiarities of the temperature cycle of the lowlands and forest glades," (With a foreword by Ye. Rubinshteyn), Trudy Glav. geofiz. observatorii, Issue 15, 1949, p. 3-74, - Bibliog: 10 items

SO: U-5240, 17, Dec. 53. (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

SUKHANOV,D.Ya., kandidat tekhnicheskikh nauk; IVANOV,V.I., kandidat tekhnicheskikh nauk, redaktor; POPOVA,S.M., tekhnicheskiy redaktor

[Using rotary pumps for viscous liquids] Rabota lopastnykh nasosov na viazkikh zhidkostях. Moskva, Gos.nauchno-tekhn.izd-vo mashino-stroitel'noi lit-ry, 1952. 32 p. [Microfilm] (MIRA 9:3)  
(Pumping machinery)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0"

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S/121/61/000/005/004/005  
D040/D112

AUTHORS: Kudinov, V.A., and Sukhanov, E.S.

TITLE: The effect of the cutter edge shape on vibration in machine tools

PERIODICAL: Stanki i instrument, no. 5, 1961, 24-25

TEXT: The article gives the results of an investigation at ENIMS on the effect of the cutting edge shape on chatter. The experiments were made with different cutting edges (shown in Figure) with a 1A62 (1A62) thread cutting lathe and blanks from "45" steel 115 mm in diameter and 550 mm length, attached by one end in a three-jaw chuck, while the other thrust against a rotating center. The cutters were tipped with P18 (R18) steel and provided with an 8° clearance and 8° auxiliary clearance, and 45° auxiliary angle in plane view. The main top rake and angle were zero, i.e. the cutter's top was made flat, so that all the cutting edges were in a plane passing through the axis of the machine centers. The chatter resistance was 60-75% higher with a two-step edge and 125-140% higher with a three-step edge. The optimum c dimension proved to be 1 - 2 mm for

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DO40/D112

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The effect of the cutter edge shape...

Cutters with a main plane angle  $20 - 40^\circ$ , and 2 - 4 mm for cutters with a  $40 - 70^\circ$  angle. The formula used for calculating the length of the cutting edge steps II and III ( $\delta$  in the figure) was:

$$a = \frac{Kt_{lim} + c \cos \varphi}{\sin \varphi},$$

where K is a coefficient = 0.7 to 0.8;  $t_{lim}$  - the cutting depth limit;  $c$  - dimension shown in figure;  $\varphi$  - main plane angle (was  $45^\circ$  in experiments). The step I length was chosen for a 6 mm cutting depth. The edge tip radius of all cutters was 0.5 mm. The durability of the stepped cutting edges was not below normal, for each step works as an independent cutter with its main and auxiliary angles. The chatter decreasing effect of concave and convex cutting edges was the same as of stepped edges (varied between 20 and 140% lower chatter, depending on the point of contact between the cutting edge and workpiece and on the shape of the cutting edge). The concave shape was more effective than the convex, and both proved equivalent to the stepped, but the stepped shape is simpler to produce and takes less time to regrind. Grooves on the front and rear edge side had only slight chatter-damping effect (12 and 5% respectively) and affected the cutting life because of

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The effect of the cutter edge shape...

S/121/61/000/005/004/005  
D040/D112

curling and jamming of the chips in the grooves. The conclusion is that if chatter starts in cutting, it must be eliminated by using cutters with a stepped cutting edge, without changing the cutting speed and depth. There is 1 figure.

Card 3/4

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SUKHANOV, E.S.

Investigating the effect of multitool turning on the vibration  
proofness of a lathe. Stan. i instr. № 6:11-14 Je '63.  
(MIRA 16:7)

(Lathes—Vibration)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0

SUKHANOV, G. (Khasanskiy rayon, Primorskogo kraya).

First school reserve. IUn. nat. no.10:21 O '58. (MINA 11:10)  
(Maritime territory--National parks and reserves)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0"

Sukhanov, G.I.

137-1958-3-5070

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 87 (USSR)

AUTHOR: Sukhanov, G.I.

TITLE: Stamping of Large Components From Heavy Steel Sheets  
(Shtampovka krupnogabaritnykh detaley iz tolstolistovoy stali)

PERIODICAL: V.I.: Kuznechno-shtampovochn. proiz-vo. Leningrad,  
Lenizdat, 1957, pp 177-192

ABSTRACT: A description of cold-drawing operations on hydraulic  
presses, drawing of complex shapes on a sheet-drawing press  
model LGS-2, methods employed in the stamping of closed-shape  
products, and the stamping of drawn cups (shells) with subsequent  
final drawing to size.

Ye.L.

Card 1/1

SUKHAROV, G. I.

25(1);18(5)

PHASE I BOOK EXPLOITATION

SOV/3382

Yekimov, Konstantin Konstantinovich, Vladimir Dmitriyevich Makrinov,  
and Georgiy Ivanovich Sukharov

Izgotovleniye pokovok pod kovachnymi molotami i pressami (Hammer  
and Press Forging) Moscow, Mashgiz, 1958. 120 p. (Series:  
Biblioteka kuznetsa-novatora, vyp. 4). 7,000 copies printed.

Reviewer: B. O. Bange, Engineer; Ed. (Title page): P. V. Kamnev,  
Candidate of Technical Sciences, Docent; Ed. (Inside book): G. T.  
Obolduyev, Engineer; Ed. of Publishing House: I. A. Borodulina;  
Tech. Ed.: O. V. Speranskaya; Managing Ed. for Literature on  
Machinery Manufacturing (Leningrad Division Mashgiz): Ye. P.  
Naumov, Engineer.

PURPOSE: This book is intended for engineering and technical  
personnel of forge shops and can also be used by engineering  
students.

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Hammer and Press Forging	SOV/3382
3. Drop hammer dies	13
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Hammer and Press Forging

SOV/3382

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Bibliography

122

AVAILABLE: Library of Congress

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VK/mph  
4-27-60

SUKHANOV, G.I., inzh.

Technival conference on d.c. machines. Vest.elektroprom. 31 no.3:  
79-80 Mr '60. (MIRA 13:6)  
(Electric machinery--Direct current)

OBOLDUYEV, G.T.; PETROV, L.N.; SUKHOV, G.I.; KAMNEV, P.V., kand.  
tekhn. nauk, red.; BULGAKOV, B.S., inzh., retsentent

[Hammering and press forging] Kovka pod molotami i pressami.  
Moskva, Mashinostroenie, 1964. 206 p. (Bibliotekha kuz-  
netsa-novatora, no.4) (MIRA 17:12)

SUKHANOV, G. K.

Bearings (Machinery)

New device for grinding spherical surfaces of bearing rings. Podshipnik, No. 2, 1952.

9. MONTHLY LIST OF RUSSIAN ACCESSIONS, Library of Congress, April 1952. Uncl.

SUKHANOV, G.K.

SUKHANOV, G.K., inzh.; LEVITSKIY, M.I., inzh.

The Bratsk Hydroelectric Power Station. Gidr.stroi. 26 no.11:  
47-56 N '57. (MIRA 10:1v;  
(Bratsk Hydroelectric Power Station)

DEVLIKAMOV, V.V.; SUKHANOV, G.N.; BUL'CHUK, D.D.

Increasing oil recovery by means of electroosmosis. Izv. vys. ucheb.  
zav.; neft' i gaz no.8:63-67 '58. (MIRA 11:10)

1. Ufimskiy neftyanoy institut.  
(Electroosmosis)

FROLOV, Boris Kuz'mich; SUKHNANOV, G.K., red.

[Temperature control of concrete during the building of dams; practices in the construction of hydraulic structures in foreign countries] Regulirovanie temperaturnogo rezhima betona pri sooruzhenii plotin; iz opyta stroitel'stva gidrouzlov za rubezhom. Moskva, Energiia, 1964. 167 p. (MIRA 18:2)

DEVLIKAMOV, V.V.; SUKHANOV, G.N.; BUL'CHUK, D.D.

Calculation of oil recovery in flooding according to reservoir  
thicknesses. Izv. vys. ucheb. zav.; neft' i gaz 3 no.8:53-57  
'60. (MIRA 14:4)

1. Ufimskiy neftyanoy institut.  
(Oil field flooding)

SUKHANOV, I. (Yelets); STREL'CHENKO, V., shofer (Bryansk); KUZNETSOV, A.

Readers' suggestion. Za rul. 17 no.11:20 N '59. (MIRA 13:4)  
(Motor vehicles)

SUKHANOV, I. M.

SUKHANOV, I. M.: "Investigation of the stability of a thin-walled housing to the effect of axial forces." Min Higher Education Ukrainian SSR. Khar'kov Construction Engineering Inst. Khar'kov, 1956. (Dissertation for the Degree of Candidate in Technical Sciences).

Source: Knizhnaya letopis' No. 28 1956 Moscow

0001 001.70.006 4367

ACC NR: AP7004253

behavior of the tape transported at a rate up to 50 m/min by a special variable-speed mechanism; the tape length accommodated up to 150-350 frames. The above experiments yielded these findings: the bin height should not exceed 500 mm; not over 10 m tape per 10 cm bin width should be stored; 1 dm<sup>2</sup> of side wall should correspond to 1.8 m tape or less; bin lid is necessary; there is no essential relation between the tape speed and the bin capacity; the bin size is reasonable (500 x 500 x 36 mm) for tapes up to 35 m long. Orig. art. has: 2 figures.

SUB CODE: 09, 13 / SUBM DATE: none

Card 2/2

POROKHOV, F.F., prof.; NALETOV, A.V., [deceased]; Prinimali uchastiye:  
SKOVORODIN, N.M., assistent; GRECHISHNIKOVA, G.D., starshiy laborant;  
KROTKOV, A.N., veter. vrach; SUKHANOV, K.M., veteran, vrach

Importance of the biomycin-vitamin concentrate in a combination  
of measures for ridding farms of infectious atrophic rhinitis  
of swine. Sbor. nauch. trud. Ivan. sel'khoz. Inst. no.19:  
155-159 '62. (MIRA 17:1)

1. Kafedra veterinarii i zoogigiyeny (zav. - prof. F.F. Porokhov)  
Ivanovskogo sel'skokhozyaystvennogo instituta.
2. Nachal'nik  
Ivanovskogo oblastnogo veterinarnogo otdela (for Naletov).
3. Uchebnoye khozyaystvo "Vasil'yevskoye", Ivanovo (for Sukhanov).

8(0)

SOV/112-59-2-2907

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 2, p 91 (USSR)

AUTHOR: Sukhanov, L. A.

TITLE: Simulating Large Power Transformers  
(Modelirovaniye moshchnykh silovykh transformatorov)

PERIODICAL: Tr. Mezhvuzovsk. nauchno-tekhn. konferentsii po dal'nim elektroperedacham, 1956, Sekts. 3. L., 1957, pp 44-54

ABSTRACT: Physical simulators are used for laboratory investigation of electrical systems and their components. Two types of simulators of large power transformers are used: (1) geometrically-similar simulators that provide a similarity of electromagnetic fields; these simulators are intended for investigating wave phenomena in windings and other phenomena in the structural members; (2) simulators that reproduce the fundamental phenomena only in terms of time; these are used when an electrodynamic system containing a transformer is simulated. In the latter case, the similarity of transformers

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SOV/112-59-2-2907

Simulating Large Power Transformers

is expressed as a relative-unit equality of the following quantities of the simulator and the original: winding electrical resistance  $r_0$ , short-circuit losses  $P_k$ , no-load losses  $P_0$ , winding reactance, and no-load characteristics. Low electromagnetic loadings are assumed for the simulator in order to obtain low winding resistances. However, with a small transformer capacity and low electromagnetic loadings (the case of simulator), the short-circuit voltage  $U_k$  is very low. In order to raise  $U_k$ , both high and low windings are specially distributed on the cores so that their resulting unbalance sets up an additional leakage flux. As a universal simulator can hardly be designed, the transformers for an electrodynamic model of a power system are built in two types: (1) a model with equal relative losses  $F_k$ , but with nonsimilar no-load characteristics; this model aids in investigating dynamic stability of electric transmission systems; (2) a model with similar no-load characteristics but unequal relative losses  $P_k$ . The formulae determining major dimensions of the

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Simulating Large Power Transformers  
first type simulators are presented, as well as the formulae for  $I_0$ ,  $P_0$ , and the  
short-circuit reactance  $X_k$ . The approximation formula for  $X_k$  is based on a  
number of assumptions. The construction of the MTO-8 34 simulator  
transformer is described; its winding connections and its fundamental  
parameters comparable with the parameters connected in a bank can simulate the  
Three such single-phase simulators connected in a bank can simulate the  
transformer bank of the Kuybyshev-Moscow transmission.

V. V. K.

Card 3/3

ELECTRICAL ENGINEERING

AUTHORS:

Sukhanov, L.A. and Urusov, I.D. (Leningrad). 24-4-2/34

TITLE:

Investigation of the movement of a rotor of a synchronous salient pole generator in the case of a sudden three-phase short-circuit. (Issledovanie dvizheniya rotora sinkhronnogo yavnopolyusnogo generatora pri vnezapnom trekhfaznom korotkom zamykaniil).

PERIODICAL:

"Izv. Ak. Nauk, Otd. Tekh. Nauk" (Bulletin of the Ac. Sc., Technical Sciences Section, 1957, No.4, pp.5-13 (USSR)).

Card 1/4

Calculation of the dynamic stability by methods generally used does not take into consideration the braking torques produced by the super-transient and aperiodic components of the short-circuit current. Investigations of this problem by Kazovskiy, E. Ya. (Elektrichestvo, 1954, No.7) showed that these moments affect appreciably the acceleration of the rotor during a short-circuit near to the terminals of the generator. The aim of the work described in this paper was to work out a sufficiently general and accurate analytical method of determination of the changes in the speed and the displacement angle of the relative movement of the rotor in three-phase short-circuits, taking into consideration a number of important factors, e.g. the speed and displacement angle components caused by the additional moment, eq.(2.5), p.7, the pulsation moment in

SUKHANOV, L.A., Cand Tech Sci -- (diss) "Electric machines  
and transformers in an electrodynamic model of a power  
system." Len 1958, 18 pp (Min of Higher Education USSR.  
Len Polytechnic Inst im M.I. Kalinin) 150 copies  
(KL, 50-58, 126)

- 85 -

SUKHANOV, L.A., inzhener.

A transformer for a miniature power system. Elektrichestvo no.<sup>4</sup>:  
82-84 Ap '57. (MLRA 10:5)

1. Institut elektromekhaniki Akademii nauk SSSR.  
(Electric transformers)

SUKHANOV, L. A.

BOBROV, V.M.; VORONOV, A.A.; GLEBOV, I.A.; IVANOV, V.I.; KARPOV, G.V.;  
KASHTELYAN, V.Ye.; SEMENOV, V.V.; SIROTKO, V.K.; SIRYY, N.S.;  
SUKHANOV, L.A.; URUSOV, I.D.; FETISOV, V.V.; FOMINA, Ye.N.;  
KOSTENKO, M.P., akademik, red.; DOLMATOV, P.S., red.izd-va;  
SMIRNOVA, A.V., tekhn.red.

[Electrodynamic modeling of power engineering systems] Elektro-  
dinamicheskoe modelirovanie energeticheskikh sistem. Pod red.  
M.P.Kostenko. Moskva, 1959. 406 p. (MIRA 13:2)

1. Akademiya nauk SSSR. Institut elektromekhaniki.  
(Electric networks--Electromechanical analogies)

PAGE 1 DOCUMENT IDENTIFICATION

Sov/776

- Andreyev, N. A.** Institut elektronicheskoi mehaniki, 77-4: Elektricheskaya mashina. Sovetsk robot po voprosam elektronicheskoye bytovye i priemernye kol'ya, peremennye kol'ya, elektricheskiy privod, elektricheskaya optika, avtomatika i skaner, elektronika i elektronika radioelektronicheskoye elektronika i elektronika na problemakh v elektronicheskoye i avtomaticheskoye elektronike (Collection of Works on Problems in Electronics in Electromechanics, Automatic Drive, AC-Electric Machine, Electric Drive, Automatic Regulation and Instruments) Moscow, Naukova Dumka, Electric Machines, Electric Drives, Automatic Regulation and Instruments) Moscow, Electric Drive of Telescop, Automatic Regulation and Instruments) Moscow, 1980. 282 p., 1,500 copies printed.
- Burg, M. I. V. Sidel'nikov** M. of Publishing Bureau T. V. Savchenko, publ. No. 12. B. A. Kostylev.
- NOTES:** This collection of works is intended for specialists in electronics and mechanics.
- CONTENTS:** The collection contains 20 works divided into three sections: 1) Automated Electric Machines; 2) Electric Drive and Electric Motion; 3) Automated Electric Drive, and Automatic Regulation and Instruments. No personal titles are mentioned. References accompany most of the articles.
- Dzhuridze, Th. L.** Competition of "Zashchep" from the type of the French in Sovietic Machines 55
- Sukharev, L. A.** Special Nature of Composition of So-called Fan Characteristics and of Current Parameters of Standard Thermoelectrodes 57
- Gavrilov, V. F. and G. E. Sosulin.** Composition of Short-Circuit Secondary of Standard Transformer 45
- Mashkov, I. Ya. and E. S. Shchetin.** Problem of Electro Heating of Synchrotron Accelerators 56
- Bogolyubov, O. I.** Improvement in Accuracy of the Experimental Determination of Losses in Synchronous Machines 62
- Kobzarev, R. G.** Problems of Originating the Magnetic Circuit of an Electric Motor with a Photocapacitive Sensor 76
- Gelets, L. P.** Designing Motors of Synchronous in an Induction System of Asynchronous Generation with a Commutator Generator 63
- Section 2. ELECTRIC MOTORS**
- Sukharev, L. A. and B. P. Smirnov.** Electrodynamical Converter of Single-Phase Current to Three-Phase Current, or Variable Frequency for Synchronous Regulation of Induction Electric Motors of Dual Purpose 92
- Mashkov, V. A. and T. M. Medvedev.** Simulation of Excitation Circuits of Dual Purpose Electric Motors 105
- Medvedev, V. M.** Distribution of Flux Density in the Air Gap of Multispeed Machine 112
- Medvedev, V. M.** Distribution of Flux Density in a Commutator Generator with a Permanent-Field Braking Amplifier 122
- Zabotinets, V. I.** General Rules and Methods of Determining Steady-State Quantities Conditions in a Circuit of Electromagnetic Energy-Jump Switches of an Electric Locomotive 128
- Sukharev, A. M. and L. A. Glazov.** Investigation of Transients in the Circuit of a Single-Phase Motor - Arc Rectifier of an Electric Locomotive 134
- Gelets, L. P.** Single-Phase Series Commutator Machine for an Electric Locomotive and Electromechanical Tools 140

SKIF/ALOU 4.4

SUKHANOV, L. A

PHASE I BOOK EXPLOITATION

SOV/4172

Akademiya nauk SSSR. Institut elektromekhaniki

Sbornik rabot po voprosam elektromekhaniki, vyp. 3: Energeticheskiye sistemy, elektromashinostroyeniye, elektricheskaya tyaga, avtomatirovannyi elektroprivod, avtomaticheskiye i telemekhanicheskiye sistemy, elektrosvarochnoye oborudovaniye (Collected Papers on Electromechanical Problems, no. 3: Power Systems, Electric Machinery Construction, Electric Traction, Automated Electric Drives, Automatic and Telemechanical Systems, Electric Welding Equipment) Moscow, Izd-vo AN SSSR, 1960. 314 p. Errata slip inserted. 5,000 copies printed.

Resp. Ed.: V.V. Sidel'nikov; Ed. of Publishing House: I.V. Suvorov; Tech. Ed.: R.A. Arons.

PURPOSE: This collection of articles is intended for scientific and technical personnel.

COVERAGE: This book is divided into sections according to the title. The scientific articles are preceded by a brief biography of Academician M.P. Kostenko, Lenin Prize Laureate, Director of the Institut elektromekhaniki AN SSSR (Institute of Electromechanics, Academy of Sciences USSR). References accompany most of the articles.

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SOV/4172

## Collected Papers (Cont.)

Sirotko, V.K., L.A. Sukhanov, and G.M. Smolin. 3.5 kva Transformer Model  
The article contains a detailed description of the MTO-3.5 transformer  
designed at the Institute of Electromechanics, Academy of Sciences USSR.  
Investigations on the power system electrodynamic simulator of this  
Institute have demonstrated the adequacy of the simulator.

81

Sukhanov, L.A. Additional Short-Circuit Losses in Simulator Synchronous  
Generators With Nonsalient Poles

89

The author describes the causes of additional short-circuit losses and  
seeks ways of reducing them. From experimental data, he concludes that  
in a correctly designed simulator generator with nonsalient poles  
additional short circuit losses could be reduced, but not below 0.4%.

100

Orurk, I.A. Rules for Regulating the Excitation in Synchronous Generators  
The author refers to the works of M.P. Kostenko and I.D. Urusov which  
established the fundamentals of rules for regulating the excitation in  
synchronous generators. He examines certain additional problems, in  
particular the operation of the machine in a zone of artificial stabili-  
ty. For this, he uses approximate equations for a synchronous machine  
expressed according to the Lebedev-Zhdanov method.

Card 5/13

SUKHANOV, L.A. (Leningrad)

Use of an electrodynamic model for studying a 2000 km. two-net-work 600 kv. a.c. power transmission system. Izv. AN SSSR. Otd. tekhn. nauk Energ. i avtom no.1:35-40 Ja-F '61. (MIRA 14:3)  
(Electric network analyzers)

SUKHANOV, L.A., kand.tekhn.nauk (Leningrad)

Approximate calculation of the effect of additional moments of  
hydroelectric generators on the dynamic stability of electric  
power transmission. Elektrичество no.2:91-93 P '61.

(MIRA 14:3)

(Hydroelectric power stations)

SUKHANOV, L.A.

Use of a model for studying the voltage distribution in a long  
balanced 600 kv. electric power transmission line. Sbor. rab. po  
vop. elektromekh. no.6:160-165 '61. (MIRA 14:9)  
(Electric power distribution--Models)  
(Electric network analyzers)

SUKHANOV, L.A.

Effect of forced excitation on the motion of a rotor at nonsymmetrical short-circuits of the salient-pole generator feeding an electric power system via a transmission line. Sbcr. rab. po vop. elektromekh. no.6:180-187 '61. (MIRA 14:9)  
(Electric power distribution) (Electric generators)

SUKHANOV, L.A. (Leningrad); PETISOV, V.V. (Leningrad); SIDEL'NIKOV, B.V.  
(Leningrad)

Methodology for calculating electromechanical transient processes  
in multiengine systems with consideration of nonlinear character-  
istics. Izv. AN SSSR. Otd. tekhn. nauk. Energ. i avtom. no.3:  
73-83 My-Je '62. (MIRA 15:6)  
(Electric machinery)

SUKHANOV, L.A.

Results of the use of an electrodynamic network analyzer in studying  
a large a.c. power transmission system with two supporting synchronous  
compensators. Sbor.rab.po vop.elektromekh.no.8160-68 '63.  
(MIRA 1075)

(Electric power distribution—Alternating current)  
(Electric network analyzers)

SUKHANOV, L.A.

Calculation of the inductive reactance of the leakage of the windings  
of model turbogenerators. Sbor.rab.po vop.elektromekh.no.8:296-301 '63.  
(MIRA 16:5)

(Turbogenerators—Windings)

VOLKOVA, Ye.A.; KAZOVSKIY, Ye.Ya., doktor tekhn. nauk; RUBISOV, G.V.;  
SAFAROV, G.M.; SUKHOV, L.A.

Calculation of the transient processes of synchronous machines in  
faulty operation by using electronic digital computers. Elektro-  
tekhnika 35 no.7:11-15 '64.

(MIRA 17:11)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0

experimental calculation of liquid-metal current conversion

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0"

L 13348-66 EWT(1)/ETC(f)/EWG(m)/EWA(h) TT/AT

ACC NR: AT6000058

SOURCE CODE: UR/0000/65/000/000/0279/0292

AUTHOR: Sukhanov, L. A.

27

B+1

ORG: none

TITLE: Calculation of the magnetic circuit of a cylindrical-rotor unipolar machine

SOURCE: AN SSSR, Institut elektromekhaniki. Elektricheskiye mashiny; issledovaniya, voprosy teorii i rascheta (Electrical machinery; research, problems - a theory and design). Leningrad, Izd-vo Nauka, 1965, 279-292

TOPIC TAGS: generator, magnetic circuit, circuit design

ABSTRACT: Considerable difficulties arise in the design of some elements of the modern cylindrical-rotor unipolar generator<sup>15</sup>; determination of the rotor magnetic state, ring-pole leakage fluxes, and kindred points has been only roughly treated in modern literature (P. Klaudy, El. und Maschinenbau, 78, no. 3, 1961; Y. Poulain, Bull. Soc. Franc. El., no. 23, 1961). The present article offers more accurate techniques for calculating the magnetizing force required for the rotor (allowing for the strong saturation due to the load current flowing in the rotor) and the leakage

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2

L 13348-66

ACC NR: AT6000058

factor of the field winding (a formula for this factor is developed which neglects the field-coil curvature). The current spreading in the rotor drum is analyzed, as is the magnetic field in the rotor steel under load conditions. A design formula for the rotor magnetizing force is derived. Orig. art. has: 7 figures, 43 formulas, and 1 table.

SUB CODE: 09// SUBM DATE: 01Mar65 / ORIG REF: 002 / OTH REF: 004

Card 2/2 F(w)

SIDEL'NIKOV, Boris Viktorovich, assistant; SUKHANOV, Lev Aleksandrovich, kand. tekhn.nauk, starshiy nauchnyy sotrudnik; YUSHCHENKO, Anatoliy Grigor'yevich, inzh.; FETISOV, Viktor Vladimirovich, kand.tekhn.nauk, dotsent

Analysis of transient processes in a two-speed induction motor with a choke in the stator circuit and intermittent power supply. Izv.vys. ucheb.zav.; elektromekhanika 8 no.6:644-654 '65.

(MIRA 18:8)

1. Kafedra elektricheskikh mashin Leningradskogo politekhnicheskogo instituta (for Sidel'nikov, Fetisov). 2. Institut elektromekhaniki, Leningrad (for Sukhanov). 3. Leningradskiy politekhnicheskiy institut (for Yushchenko).

L 14053-66 EWT(m)/EWP(w)/EPP(n)-2/T/EWP(t)/EWP(z)/EWP(b) IJP(c) JD/MW/HW/JC/  
ACC NR: AT600057 DJ/GS SOURCE CODE: UR/0000/6;000/000/0267/0278

AUTHOR: Sukhanov, L. A.; Bobkov, Yu. A.; Safiullina, R. Kh.

83 79  
341

ORG: none

11/11

TITLE: Current collectors with liquid metal contact for acyclic machines

SOURCE: AN SSSR. Institut elektromekhaniki. Elektricheskiye mashiny; issledovaniya, voprosy teorii i rascheta (Electrical machinery; research, problems in theory and design), Leningrad, Izd-vo Nauka, 1965, 267-278

TOPIC TAGS: electric generator, liquid metal, slip ring, direct current, electric engineering, friction loss

ABSTRACT: The author discusses various mechanical losses in homopolar dynamos with current collectors based on low-melting alloys. Current collector designs are divided into two basic categories: 1. the ring type in which the channel between the contact surfaces is completely filled with the liquid metal; 2. the jet type in which contact is made at individual points around the circumference by a thin pressurized jet of liquid metal. The advantages and disadvantages of each of these

Card 1/2

2

L 14053-66

ACC NR: AT6000057

4

types are discussed. Tests of a mercury jet contact show a resistance of less than  $10^{-3}$  Ω for a linear rotor velocity of 150 m/sec, a current of 1000 amps and mechanical losses in the jet of about 750 w. The authors describe the centrifugal ring contact in horizontal and vertical homopolar machines. Electrical losses in this type of current collector are analyzed. Consideration is given to the formation of a contaminant layer by the interaction between the liquid metal and the surface of the current collector rings. Experimental data show an increase in equivalent resistance with time which differs for various metals. It is found that nickel is especially suitable for use in current collectors. Formulas are given for determining losses due to friction in the contact zone. The various formulas given for electrical and mechanical losses are used as a basis for deriving analytical expressions for selecting optimum dimensions of the contact zone. Orig. art. has: 4 figures, 4 tables, 22 formulas.

SUB CODE: 10/ SUBM DATE: 01Mar65/ ORIG REF: 002/ OTH REF: 007

b7c  
Card 2/2

L 14052-66 EWT(m)/EPF(n)-2/T/EWP(t)/EWP(b) JD/WW/JG/DJ  
ACC NR: AT6000059

SOURCE CODE: UR/0000/65/000/000/0292/0299

AUTHOR: Sukhanov, L. A.

69  
BT1

ORG: none

TITLE: Analysis of the stability of liquid position in the ring current collector of an acyclic machine during current overload

SOURCE: AN SSSR. Institut elektromekhaniki. Elektricheskiye mashiny; issledovaniya, voprosy teorii i rascheta (Electrical machinery; research, problems in theory and design), Leningrad, Izd-vo Nauka, 1965, 292-299

TOPIC TAGS: electric generator, direct current, liquid metal, slip ring

ABSTRACT: The authors analyze the stability in the position of the liquid metal medium in the annular channel between the current collector surfaces of a homopolar generator. Formulas are derived for calculating the effect of centrifugal and electromagnetic forces on the liquid particles in the current collector. The stable position of the liquid metal medium during operation of the generator is determined by equilibrium between electromagnetic and centrifugal forces. This condition is

Card 1/2

2

L 14052-66

ACC NR: AT6000059

used as a basis for determining the limiting overload current for such a machine.  
Orig. art. has: 3 figures, 14 formulas.

SUB CODE: 10/ SUBM DATE: 01Mar65/ ORIG REF: 002/ OTH REF: 001

BVK  
Card 2/2

SUKHANOV, L.A. (Leningrad); RUBISOV, G.V. (Leningrad); VOLKOVA, Ye.A.  
(Leningrad)

Increase in the dynamic stability of enclosed hydrogenerators.  
Izv. AN SSSR. Energ. i transp. no.1:123-128 Ja-F '64.  
(MIRA 17:4)

RETYAKOV, M.M., inzh.; SHAPOVALOV, A.P., inzh.; GUSAKOV, A.N., inzh.;  
UDOVICHENKO, N.V., inzh.; BESPALEV, V.N., inzh.; KUZNETSOV, D.K.,  
inzh.; SUKHANOV, L.F., inzh.

Obtaining a flat sheet of transformer steel. Stal' 25 no.12:  
1132-1134 D '65. (MIRA 18:12)

I. Novolipetskiy metallurgicheskiy zavod i TSentral'nyy nauchno-  
issledovatel'skiy institut chernoy metallurgii imeni I.F. Bardina.

1. SUKHANOV, M., Eng.
2. USSR (600)
4. Mineral Wool
7. Coke economy in mineral wool plants. Za ekon mat. No 1 1953.
  
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

SUKHANOV, M.

"Center for Agricultural Economic Culture on the Bud'oni Collective Farm" p. 36, (KOOPERATIVNO ZEMEDELIE, Vol. 10, No. 1, Jan. 1955, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4  
No. 5, May 1955, Uncl.

SUKHANOV, M.

"Eight Years Since the Introduction of Agrarian Reforms in Atbanta.  
Tr. from the Albanian." p. 38,  
(KOOPERATIVNO ZEMEDELIE, Vol. 10, No. 1, Jan. 1955, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4  
No. 5, May 1955, Uncl.

SUKHÁNOV, M.

"Agrarian Reforms and Women in the New China. Tr. from the Russian." p. 38,  
(KOOPERATIVNO ZEMEDELIE, Vol. 10, No. 1, Jan. 1955, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4  
No. 5, May 1955, Uncl.

SUKHANOV, M.

"Electrification of Rural Villages." p. 39,  
(KOOPERATIVNO ZEMEDELIE, Vol. 10, No. 1, Jan. 1955, Sofiya, Bulgaria)

Re: Monthly List of East European Accessions, (EEAL), LC, Vol. 4  
No. 5, May 1955, Uncl.

SUKHANOV, M.

"Green Fodder Supply"; a Motion-Picture Review." p. 40,  
(KOOPERATIVNO ZEMEDELIE, Vol. 10, No. 1, Jan. 1955, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4  
No. 5, May 1955, Uncl.

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0

SUKHANOV, M., kand. na. tekhn. nauki

Disklike glider. Aviats kosmonavt 6 no.9-4 '64.

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0"

GORSHENKOV, A.D.; SUKHANOV, M.A.

Pneumatic assembling cramps in the manufacture of musical keyboard instruments. Der. prom. 11 no.8:23-25 Ag '62. (MIRA 17:2)

1. Moskovskaya fabrika klavishnykh instrumentov "Lira".

SUKHANOV, Mikhail Aleksandrovich; NIKIFOROV, I.A., kand. tekhn.  
nauk, nauchn. red.; GLAZUNOVA, Z.M., red.izd-va;  
SHERSTNEVA, N.V., tekhn. red.

[Effectiveness of using insulating materials in rural  
construction] Effektivnost' primeneniia teploizoliatsion-  
nykh materialov v sel'skom stroitel'stve. Moskva, Gos-  
stroizdat, 1963. 101 p. (MIRA 17:2)

SUKHANOV. M. A.

Peat Industry

Mechanizing the cutting and loading of peat for  
production on insulating plates., Torf. prom., No. 8, 1952.

Monthly List of Russian Accessions, Library of Congress,  
October, 1952. UNCLASSIFIED.

ANTONOV, V.Ya., kand.tekhn.nauk; BEZZUBOV, N.D., kand.tekhn.nauk; BELOKO-PYTOV, I.Ye., kand.sel'skokhoz.nauk; BLYUMENBERG, V.V., kand.tekhn.nauk; BOGDANOV, N.N., kand.tekhn.nauk; BRAGIN, N.A., inzh.; VASIL'IEV, Yu.K., inzh.; VINOGRADOV, V.A., inzh.; ROZENBERG, B.I., inzh.; GOR-GIDZHANYAN, S.A., kand.tekhn.nauk; ZIZA, A.A., kand.sel'skokhoz.nauk; KALABUKHOV, M.V., agronom-meliorator; KOLOTUSHKIN, V.I., inzh.; KORCHUNOV, S.S., kand.tekhn.nauk; KRYUKOV, M.N., dotsent; VAVULO, V.A., inzh.; NAUMOV, D.I., kand.tekhn.nauk; OLENIN, A.S., inzh.; PROVORKIN, A.S., inzh.; FROKHOROV, N.I., dotsent; RASKIN, G.I., inzh.; SAVENKO, I.V., inzh.; SERGEYEV, B.F., kand.tekhn.nauk; STOYLIK, M.A., inzh.; SUKHO-MOV, M.A., inzh.; TOPOL'NITSKIY, N.M., kand.tekhn.nauk; TYUREMNOV, S.N., doktor biol.nauk, prof.; PATCHIKHINA, O.Ye., kand.sel'skokhoz.nauk; TSVETKOV, B.I., inzh.; CHUBAROV, N.D., inzh.; MANDEL'BAUM, A.I., inzh.;

(Continued on next card)

ANTONOV, V.Ya.---(continued) Card 2.

YARTSEV, A.K.; SAMSONOV, N.N., inzh., glavnyy red.; BERSHADSKIY, L.S., inzh., nauchnyy red.; VARENTSOV, V.S., kand.tekhn.nauk, nauchnyy red.; VYSOTSKIY, K.P., kand.tekhn.nauk, nauchnyy red.; GORINSHTEYN, L.L., kand.tekhn.nauk, nauchnyy red.; GORYACHKIN, V.G., prof., nauchnyy red.; YEFIMOV, P.N., kand.tekhn.nauk, nauchnyy red.; KUZEMAN, G.I., kand.tekhn.nauk, nauchnyy red.; KULAKOV, N.N., kand.tekhn.nauk, nauchnyy red.; KUTAIS, L.I., prof., doktor tekhn.nauk, nauchnyy red.; MIRKIN, M.A., inzh., nauchnyy red.; SEMENSKIJ, Ye.P., kand.tekhn.nauk, nauchnyy red.; SOKOLOV, A.A., kand.tekhn.nauk, nauchnyy red.; KHAZANOV, Ya.N., dotsent, nauchnyy red.; KHALUGO, A.K., inzh., nauchnyy red.; TSUPROV, S.A., dotsent, nauchnyy red.; SHTEYNBOK, G.D., inzh., nauchnyy red.; KOLOTUSHKIN, V.I.. red.; SKVORTSOV, I.M., tekhn.red.

[Reference book on peat] Spravochnik po torfu. Moskva, Gos.energ. izd-vo, 1954. 728 p. (MIRA 13:?)

1. Chlen-korrespondent AN BSSR (for Goryachkin).  
(Peat—Handbooks, manuals, etc.)

SUKHANOV, M.A., inzh.; VARENTSOV, V.S., red.; LARIONOV, G.Ye., tekhn.  
red.

[Heat insulating materials made from peat] Teploizoliatsionnye  
materialy iz torfa. Moskva, Gos. energ. izd-vo, 1960. 87 p.  
(MIRA 14:9)

(Peat)

(Insulating materials)

SUKHANOV, M., insl.

Manufacture of peat slabs. Sel'stroi. 15 no.6:19-20  
Je '60. (MIRA 13:8)  
(Peat) (Insulation(Heat))

SUKHANOV, M.A., inzh.

Peat insulating panels. Torf.prom. 37 no.1:28-29 '60.  
(MIRA 13:6)

1. Giprotofrazvedka.  
(Peat) (Insulating materials)

SUKHANOV, M.A., inzh.

Use of insulating peat plates in the construction of large panels.  
Torf. prom. 37 no. 3:22-25 '60. (MIRA 14:1)

1. Giprotorf.

(Peat)

(Building materials)

SULEMANOV, M.A.

Development of the industry of peat insulating materials. Torf.prom.  
38 no.1:38 '61. (.E.A 14:2)  
(Peat) (Insulating materials)

GORSHENKOV, A.D., inzh.; SUKHOV, M.A., inzh.

Pneumatic hoist table for the "Mikhoma" hydraulic press.  
Der.prom. 11 no.6:20-21 Je '62. (MIRA 15:6)

1. Moskovskaya fabrika klavishnykh instrumentov "Lira".  
(Veneers and veneering~Equipment and supplies)  
(Hoisting machinery)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0

TSUPROV, S.A.; SUKHANOV, M.A.

Chronicle. Torf.prom. 40 no.5:35-36 '63.  
(Peat industry)

(MIRA 16:8)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0"

SUKHANOV, M.A., inzh.

Standardization of parts for dining tables at the "Lira" Moscow  
Factory. Der. prom. 14 no.2:21-22 F !65.

(MIRA 18:6)

GORSHENKOV, A.D., inzh.; SUKHANOV, M.A., inzh.

Pneumatic glue setting frame in the manufacture of pianos.  
Der. prom. 14 no.8;26-28 Ag '65. (MIRA 18:10)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001653810007-0

and haematological indices and by the appearance in the male's blood

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EX-11

EX-11

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SCHULMAN, M. I.

Cand. Phys. Sci.

Dissertation: "Elementary Biscell-Stream Theory of a Brouillon." Moscow Order of Lenin Aviation Institute T. Gruz'evskogo, 15 Dec 47.

See: Yekaterinburg, Russia, Dec, 1947 (Project A1736)

ACCESSION NR: AP4020523

S/0029/64/000/002/0016/0017

AUTHOR: Sukhanov, M. (Candidate of technical sciences)

TITLE: Attention! In the Air.....

SOURCE: Tekhnika - molodezhi, no. 2, 1964, 16-17

TOPIC TAGS: "Diskoplan-1" glider, wing span, wing area, weight, aerodynamics, dynamic stability, maneuverability, steel piano wire, percale covering, duralip, aileron, three-point land, "Alouette"

ABSTRACT: Young scientists and social-worker designers in 1950 created the "Diskoplan-1" glider, with 3.5 m wing span, 10 sq m wing area, 230 kg flight wing, maximum aerodynamic quality  $K_{Max}$  = 7, to test unusual aerodynamic designs more cheaply and safely. The main distinctive feature of its circular wing is the smooth flow of air around it, even at angles of attack up to 45°, with its lifting power increasing continually, as shown in a graph. Hence, it does not go into a spin under any flight conditions. Only a straight, extremely

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stable parachute jump is possible from maximum angles. The glider has good dynamic stability and maneuverability under all conditions. The round wing of the 1962 model, "Diskoplan-2", is without longerons or ribs, and shaped like a huge bicycle wheel, the rim and hub of which are guyed with 0.2 mm steel piano wire. The two-layered percale covering combined with a wire net give it a two-cone profile. Sharp dural lips around the rim improve the aerodynamics and stability and give it a "finished supersonic look." Wing diameter 5 m, bearing surface 20 sq m, flight weight 240 kg, specific load on wing only 12 kg/sq m. Steered by revolving rudder and ailerons, serving as ailerons and altitude rudder. The "Air-cushion" effect stabilizes it automatically in descent, so that it can make a safe three-point landing without being steered. The article ends with a brief account of supersonic disk-shaped plane development (including "Alouette") by NASA and leading US airplane companies, desired characteristics and purposes. Orig. art. has: 5 graphs of performance and 2 photos.

Card 2/3 A

SUKHANOV, M.Ye.

Combined treatment of villosus tumors of the bladder. Urologia  
no.3:38-41 J1-S '55. (MLRA 8:10)

1. Iz Ukrainskog rentgeno-radiologicheskogo onkologicheskogo  
instituta (dir. dotsent Ye.A.Bazlov)  
(BLADDER, neoplasms,  
villous, ther.)

SUKHANOV, M. Ye., dotsent

Tumors of the testis. Urologiia no.6:38-42 '61. (MIRA 15:4)

1. Iz Khar'kovskogo instituta meditsinskoy radiologii.

(TESTICLE—TUMORS)

SUKHANOV, N.

For further improvement in the work of savings banks. Fin. SSSR 18  
no. 4:33-37 Ap '57. (MIRA 10:6)

1. Zamestritel' nachal'nika Glavnogo upravleniya Gosudarstvennoy tru-  
dovoy sberegatel'noy kasy i goskredita.  
(Savings banks)

SUKHANOV, N.

Our Palace of Culture prepares for the Congress. Sov.shakht.  
10 no.7:12 Jl '61. (MIRA 14:8)

1. Predsedatel' pravleniya Dvortsya kul'tury "40 let Oktyabrya",  
g. Novogrodkovka, Stalinskoy oblasti.  
(Donets Basin--Coal miners)